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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,192	02/19/2002	Gary Handwerker	6081-005	7298

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ROSENBAUM & ASSOCIATES, P.C.
650 DUNDEE ROAD
SUITE 380
NORTHBROOK, IL 60062

EXAMINER

LONEY, DONALD J

ART UNIT PAPER NUMBER

1772

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

5

Office Action Summary	Application No. 10/079,192	Applicant(s) HANDWERKER, GARY	
	Examiner Donald Loney	Art Unit 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2005 and 20 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6,7,9-15,17-20 and 22-27 is/are pending in the application.
- 4a) Of the above claim(s) 6,15,17,19,20,22-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,7,9-14 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Species A in the reply filed on September 20, 2006 is acknowledged. The traversal is on the ground(s) that there is no serious burden to examine all claims and that the species are not independent or distinct from one another. This is not found persuasive because it would be a burden to examine two distinct inventions which are structurally distinct in that the outer layer has a different structure (i.e. a reflective material dispersed throughout a polymer versus a reflective material applied thereto) in each species.

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

2. Claim 9 is objected to because of the following informalities: There is no direct antecedent basis for "said heat reflective material". The applicant may be referring to "the heat reflective elements" in claim 7. Of note, if this is the case then how could the material be a coating as referred to in claim 9 when claim 7 refers to "elements dispersed throughout the polymer"? Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1772

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1, 2, 4, 7 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over any of Hines et al (3577305), Edgel (4579756) or Hunter (5792539) in view of the Applicant's discussion of the prior art (ADPA).

All of the primary references teach a top outer layer, a bottom outer layer, a first heat insulating element disposed in spaced relation, a second heat insulating element in spaced relation wherein the edges of the outer layers are sealed to form an impervious chamber per claim 1. Independent claim 7 only recites one middle insulative element. See figures 1-3 in Hines showing outer layers 22, 26 and the spaced insulative intermediate layers 30 which have cells 32 formed therefrom sealed around the edge 36' thereof. The outer layers are disclosed as a metal coated plastic film (column 3, lines 32-40). Refer to figures 2 and 11 in Edgel showing outer layers 11,12 and the spaced insulative intermediate layers 13 and the edge seal around each section 10 formed from the blanket. The outer layers are disclosed as a metal coated plastic film (column 4, lines 1-12). Refer to figures 1-5 and 12 in Hunter showing outer layers

Art Unit: 1772

20,30,24,34 and the spaced insulative intermediate layers 12,14 and the edge seal 42 around the edge of the blanket. The outer layers are disclosed as a metal coated plastic film (column 10 line 38 through column 11, line 36). The difference between the claimed invention of independent claims 1 and 7 is that the prior art fails to teach the outer bottom layer as having heat reflective elements dispersed throughout the polymer, they teach foil coated plastics.

However, from the ADPA on page 10, lines 12-18 and the applicant's comments filed September 20, 2006 (page 9, third full paragraph) it is known that reflective layers can be formed on either metal coated plastics or plastics with metal dispersed therein.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to the primary references to substitute one reflective layer for another (i.e. plastic with dispersed material versus coated plastic) as the outer layer, as taught to be known by the ADPA, motivated by the fact the primary references teach the outer layer to be reflective. With regards to claims 2, 4 and 7 that the layers are fixed to one another, it would be obvious to one of ordinary skill in the art to fix components together in order to keep them from moving relative to one another. With regards to claims 9-12, it would be obvious to one of ordinary skill in the art to apply reflective material to whichever layer(s) desired motivated by the fact the prior art discloses the outer layers being reflective and this would just impart the same properties to the other layers, which would increase the reflectivity of the blanket by having more layers have said property.

Art Unit: 1772

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over any of Hines et al (3577305), Edgel (4579756) or Hunter (5792539) in view of the Applicant's discussion of the prior art (ADPA) as applied to claims 1, 2, 4, 7 and 9-12 above, and further in view of Sheridan (5011743).

The combination of the primary references disclose the invention substantially as recited except for the top layer being dark in color. See 35 USC 103 rejection above.

Sheridan et al teaches that one can apply a black coating to desired sections of an enveloped heat insulating pad containing spaced interior elements in order to improve heat radiating characteristics of the pad. Refer to the Abstract and column 3, lines 17-44.

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to the primary references to provide a black layer thereon, as taught by Sheridan, in order to improve the heat radiating means thereof motivated by the fact that this layer would function the same as the applicants' dark layer.

7. Claims 1, 2, 4, 9-12, 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over any of Brockhaus (4535828), Handwerker (5549956) or WO 98/10216 to Aanestad in view of the applicant's discussion of the prior art ADPA.

Brockhaus teaches two bubble layers 43 contained between two outer layers 45. Figure 1 shows complete encapsulation of the bubble layers. A foil layer may be applied between the bubble layers and/or be applied to the skin layers. This would then read upon the embodiments of both the outer layers and/or the insulative bubble layer(s) having a reflective layer thereon. Refer to figures 1 and 2C along with column 2, lines

Art Unit: 1772

12-60, column 4, lines 44-47 and column 5 lines 23-48. WO 98/10216 to Aanestad teaches insulation that contains two outer layers (16 or 20 and 18 or 22), two bubble insulating layers (10, 12) there between with reflective layers (16, 18) on what can be considered either the bubble layers or outer layer when not looking at layers 16 and 18 as outer layers. Refer to the Figure, Abstract and page 11, line 32 through page 14, line 2 along with the claims. The reference contains layers that would read upon the four arrangements of independent claims 1, 7 and 14. For claim 1, either layer 16 or 20 can be considered the top layer, layer 10 is the first insulated bubble layer, layer 12 the bottom insulative bubble layer with reflective film 18 thereon. For claim 7, either layer 16 or 20 can be considered the top layer, layer 10 or 12 the insulative bubble layer, layer 22 the bottom layer with reflective layer 18 thereon. For claim 14, either layer 16 or 20 can be considered the top layer, layers 10 and 12 the bubble layer and layer 22 the bottom layer with reflective film 18 thereon. Handwerker teaches an insulation blanket with two inner bubble layers (16, 30) enveloped by two outer layers (12, 14) wherein a reflective layer(s) (18, 32) is/are located between (i.e., on both the outer and bubble layer) the bubble layers and outer layers which is sealed at the edge thereof. Refer to Fig. Nos. 4-6 along with the corresponding text to the numbers referred to above. Handwerker layers 12, 18, 16, 34, 30, 32 and 14 are equivalent to Aanestad layers 20, 16, 10, 14, 12, 18 and 22 respectively as discussed above, except for layer 34 being a foil in Handwerker and a plastic film in Aanestad. Therefore, the layers apply to the claims as explained above just using the reference numbers in Handwerker that equate to Aanestad. The difference between the claimed invention of independent claims 1, 7

Art Unit: 1772

and 14 is that the prior art fails to teach the outer bottom layer as having heat reflective elements dispersed throughout the polymer, they teach foil coated plastics. The examiner has included claim 14 herein since the applicant elected claim 18 drawn to species A. This rejection is being made to specifically addresses the bubble layers per claim 14.

However, from the ADPA on page 10, lines 12-18 and the applicant's comments filed September 20, 2006 (page 9, third full paragraph) it is known that reflective layers can be formed on either metal coated plastics or plastics with metal dispersed therein.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to the primary references to substitute one reflective layer for another (i.e. plastic with dispersed material versus coated plastic) as the outer layer, as taught to be known by the ADPA, motivated by the fact the primary references teach the outer layer to be reflective. With regards to claims 2, 4 and 7 that the layers are fixed to one another, it would be obvious to one of ordinary skill in the art to fix components together in order to keep them from moving relative to one another. With regards to claims 9-12, it would be obvious to one of ordinary skill in the art to apply reflective material to which ever layer(s) desired motivated by the fact the prior art discloses the outer layers being reflective and this would just impart the same properties to the other layers, which would increase the reflectivity of the blanket by having more layers have said property. With regards to the arrangement of the bubble layers in claim 14, it would be obvious to one of ordinary skill in the art to position them as recited motivated by the fact all of the primary references disclose two bubble layers in the

Art Unit: 1772

blanket. With regards to sealing the edges in Aanestad and Brockhaus, since they do not specifically disclose so, it would be obvious to seal the edges for the same reason as is taught to be known by Handwerker. With regards to the unslit limitations of claim 14 with respect to Brockhaus, it would have been obvious to one of ordinary skill in the art to omit an element or its intended function as a matter of obvious design choice. See *In re Karlson*, 136 USPQ 184 (CCPA 1963).

8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over any of Brockhaus (4535828), Handwerker (5549956) or WO 98/10216 to Aanestad in view of the applicant's discussion of the prior art ADPA as applied to claims 1, 2, 4 and 9-12 above, and further in view of Sheridan (5011743).

The combination of the primary references disclose the invention substantially as recited except for the top layer being dark in color. See 35 USC 103 rejection above.

Sheridan et al teaches that one can apply a black coating to desired sections of an enveloped heat insulating pad containing spaced interior elements in order to improve heat radiating characteristics of the pad. Refer to the Abstract and column 3, lines 17-44.

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to the primary references to provide a black layer thereon, as taught by Sheridan, in order to improve the heat radiating means thereof motivated by the fact that this layer would function the same as the applicants' dark layer.

Response to Arguments

9. Applicant's arguments, filed December 15, 2005, with respect to claims 1, 2, 4, 7, 9-14 and 18 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald Loney whose telephone number is (571) 272-1493. The examiner can normally be reached on Mon, Tues, Thurs and Fri. 8AM-4PM, flex schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/079,192

Page 10

Art Unit: 1772

A handwritten signature in black ink, appearing to read "Donald Loney", with a long, sweeping horizontal stroke extending to the right.

Donald Loney
Primary Examiner
Art Unit 1772

DJL:D.Loney
11/25/06